

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

5

Claims 1-20 (canceled)

Claim 21 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:

- 10 a first coating disposed on a first surface of an object which is submersible, said first coating comprising an electrically conductive polymer-based material;
- an electrode; and
- an electrical current source which is connectable in electrical communication with said first coating and said electrode, said electrode being connectable in electrical communication with said electric current source to form an electrical circuit comprising said first coating, said
- 15 electric current source, said electrode, and water in which both said electrode and said first coating are disposed,
- wherein:
- said electrically conductive polymer-based material comprises a nonconductive polymer matrix with electrically conductive particles disposed therein;
- 20 said nonconductive polymer matrix material is vinyl ester.

Claim 22 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:

- a first coating disposed on a first surface of an object which is submersible, said first coating comprising an electrically conductive polymer-based material;
- 25 an electrode; and
- an electrical current source which is connectable in electrical communication with said first coating and said electrode, said electrode being connectable in electrical communication with said electric current source to form an electrical circuit comprising said first coating, said electric current source, said electrode, and water in which both said electrode and said first
- 30 coating are disposed,
- wherein:

said electrically conductive polymer-based material comprises a nonconductive polymer matrix with electrically conductive particles disposed therein;
said conductive particles are graphite.

- 5 Claim 23 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:
a first coating disposed on a first surface of an object which is submersible, said first coating comprising an electrically conductive polymer-based material;
an electrode; and
an electrical current source which is connectable in electrical communication with said
10 first coating and said electrode, said electrode being connectable in electrical communication with said electric current source to form an electrical circuit comprising said first coating, said electric current source, said electrode, and water in which both said electrode and said first coating are disposed,
wherein:
15 said matrix material is vinyl ester and said conductive particles are graphite.

- Claim 24 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:
a first coating disposed on a first surface of an object which is submersible, said first coating comprising an electrically conductive polymer-based material;
20 an electrode; and
an electrical current source which is connectable in electrical communication with said first coating and said electrode, said electrode being connectable in electrical communication with said electric current source to form an electrical circuit comprising said first coating, said electric current source, said electrode, and water in which both said electrode and said first
25 coating are disposed,
and further comprising:
a boat hull comprising a fiberglass layer, a conductive layer, and an intermediate layer, said conductive layer comprising said first coating.

- 30 Claim 25 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:

a first coating disposed on a first surface of an object which is submersible, said first coating comprising an electrically conductive polymer-based material;

an electrode; and

an electrical current source which is connectable in electrical communication with said first coating and said electrode, said electrode being connectable in electrical communication with said electric current source to form an electrical circuit comprising said first coating, said electric current source, said electrode, and water in which both said electrode and said first coating are disposed,

wherein:

said electrically conductive polymer-based material comprises a nonconductive polymer matrix with a first set of electrically conductive particles disposed therein;

said electrode comprises a second coating, said second coating comprising said nonconductive polymer matrix with a second set of electrically conductive particles disposed therein;

and further comprising:

a boat hull having a starboard side and a port side, said port side of said hull being at least partially covered by said first coating, said starboard side of said hull being at least partially covered by said second coating, said first and second coatings being electrically insulated from each other,

wherein:

said boat hull has an inner fiberglass layer and an intermediate layer, said first coating being disposed on said port side of said intermediate layer, said second coating being disposed on said starboard side of said intermediate layer.

Claim 26 (new): Apparatus for inhibiting the fouling of a submersible object, comprising:

a boat hull having a port side and a starboard side, said boat hull comprising a structural supporting layer;

a first coating layer disposed on said port side of said structural supporting layer, said first coating layer comprising a first material having a second material suspended within said first material, said second material being electrically conductive;

a second coating layer disposed on said starboard side of said structural supporting layer
said second coating layer comprising said first material having said second material suspended
within said first material, said first and second coating layers being electrically separated from
each other;

5 a source of current connected in electrical communication with said first and second
coating layers to sequentially cause an electrical current to flow in a direction from said source of
current toward said first coating layer and subsequently to cause said electrical current to flow in
a direction from said source of current toward said second coating layer;

and further comprising:

10 an intermediate layer disposed on said structural support layer, said first and second
coating layers being disposed on said intermediate layer.

Claim 27 (new): The apparatus of claim 26, wherein:
said intermediate layer is a gel coat compound.

15 .

Claim 28 (new): The apparatus of claim 27, wherein:
said first and second coating layers comprise graphite particles supported in a vinyl ester
matrix.